What is claimed is:

1. A liquid chromatography reagent for isolating one or more analytes contained within a sample, comprising an aqueous phase for receiving said sample and forming a solution of said analytes, wherein said aqueous phase is a chiral mobile phase having the formula:

$$R_1 - C^* - R_3$$
$$|$$
$$R_2$$
$$|$$
$$R_4$$

wherein

R_1 - R_4 are all different, and wherein the individual R group is selected from the group consisting of hydrogen, alkanes, alkenes, alkyl groups for example C_1 - C_{24} and greater, aryl, arylalkyl, hydroxyl, halogens, esters, ethers, alcohols, saturated and/or unsaturated hydrocarbons, branched and/or unbranched hydrocarbons, amines, amidines, amides, ketone, acetone, dienes, carboxyl, sulfhydrals, sulfates, sulfonates, sulfur, enols, and combinations thereof.

2. The reagent of claim 1, wherein said sample has two or more enantomeric analytes.

3. The reagent of claim 1 further comprising a buffering agent.

4. The reagent of claim 1, wherein said chiral mobile phase is selected from the group consisting of 2-butanol, 2-butylamine, 3-amino-1,2-propanediol, 1-amino-2-propanol, 2-amino-1-propanol, 1-dimethylamino-2-propanol, 1,2-propanediol, propylene carbonate, 1,2-diaminopropane dihydrochloride, 1-methyl-2-pyrrolidone, methyl-2-pyrrolidone-5-carboxylate, 1,2-dichloropropane, 2-bromopropionic acid, 2-

bromopropionitrile, 2-chloropropionic acid, 2-chloropropionitrile, epichlorohydrin, 3-chloro-2-methylpropionitrle, 1-bromo-3-chloro-2-methylpropane, propylene oxide, 1,2-propanediol diacetate, 1-methoxy-2-propanol, 1-methoxy-2-propanol acetate, 1,2-diamino propane, 3-aminopyrrolidine, 4-chloro-3-hydroxy butyronitrile, 1-chloro-2-propanol, 2-chloro-1-propanol, methyl-2,3-dichloropropionate, 2-butanol, 1,2,4-butanetriol, 1,3-butanediol, 2,3-butanediol, β-hydroxy-γ-butyrolactone, 3-chloro-2-butanone, 4-chloromethyl-2,2-dimethyl-1,3-dioxolane, 1-chloro-2-methylbutane, methyl-2-chloropropionate, and 3-hydoxy pyyrolidine.

5. The reagent of claim 1, wherein said chiral mobile phase comprises from about 70% to about 100% of either a "R" or "S" enantiomer.

6. The reagent of claim 1, wherein said chiral mobile phase comprises from about 85% to about 100% of either a "R" or "S" enantiomer.

7. The reagent of claim 1, wherein said chiral mobile phase comprises from about 90% to about 100% of either a "R" or "S" enantiomer.

8. The reagent of claim 1, wherein said chiral mobile phase comprises from about 95% to about 100% of either a "R" or "S" enantiomer.

9. A method of separating analytes contained within a sample, wherein said sample has one or more enantiomeric analytes, comprising:

providing a reagent having a chiral mobile phase with the formula:

$$R_1 - C^* - R_3$$
$$|$$
$$R_2$$

R_4

wherein

R_1 - R_4 are all different, and wherein the individual R group is selected from the group consisting of hydrogen, alkanes, alkenes, alkyl groups for example C_1 - C_{24} and greater, aryl, arylalkyl, hydroxyl, halogens, esters, ethers, alcohols, saturated and/or unsaturated hydrocarbons, branched and/or unbranched hydrocarbons, amines, amidines, amides, ketone, acetone, dienes, carboxyl, sulfhydrals, sulfates, sulfonates, sulfur, enols, and combinations thereof;

introducing said sample into a means for separation; and

contacting said sample with said chiral mobile phase resulting in an admixture.

10. The method of claim 9 further comprising the step of detecting one or more analytes of interest.

11. The method of claim 10, wherein said detection is accomplished using mass spectrometry, nuclear magnetic resonance, ultra-violet, refractive index, infrared spectroscopy, fluorescence, photodiode array, evaporative light scattering, conductance, and nitrogen/sulphur specific detectors.

12. The method of claim 9, wherein said chiral mobile phase is selected from the group consisting of 2-butanol, 2-butylamine, 3-amino-1,2-propanediol, 1-amino-2-propanol, 2-amino-1-propanol, 1-dimethylamino-2-propanol, 1,2-propanediol, propylene carbonate, 1,2-diaminopropane dihydrochloride, 1-methyl-2-pyrrolidone, methyl-2-pyrrolidone-5-carboxylate, 1,2-dichloropropane, 2-bromopropionic acid, 2-bromopropionitrile, 2-chloropropionic acid, 2-chloropropionitrile, epichlorohydrin, 3-chloro-2-methylpropionitrle, 1-bromo-3-chloro-2-methylpropane, propylene oxide, 1,2-propanediol diacetate, 1-methoxy-2-propanol, 1-methoxy-2-propanol acetate, 1,2-diamino propane, 3-aminopyrrolidine, 4-chloro-3-hydroxy butyronitrile, 1-chloro-2-propanol, 2-chloro-1-propanol, methyl-2,3-dichloropropionate, 2-butanol, 1,2,4-butanetriol, 1,3-butanediol, 2,3-butanediol, β-hydroxy-γ-butyrolactone, 3-chloro-2-

butanone, 4-chloromethyl-2,2-dimethyl-1,3-dioxolane, 1-chloro-2-methylbutane, methyl-2-chloropropionate, and 3-hydoxy pyyrolidine.

13. The method of claim 9, wherein said analytes elution order is reversed by manipulating said chiral mobile phase.

14. The method of claim 9, wherein said aqueous phase further comprises a buffering agent.

15. The method of claim 9, wherein said means for separation is selected from the group comprising liquid chromatography and capillary liquid chromatography.

16. The method of claim 9, wherein an isocratic elution method is employed for separating said analytes.

17. The method of claim 9, wherein a gradient elution method is employed for separating said analytes.